



INSTALLATION INSTRUCTIONS

2650-1308-00 Rev. A

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Throttle Stop Model TS-3**

"Double Bear"

**AA = air/air

**SS = sol/sol

**SA = sol/air

INSTALLATION

- 1) Remove the carburetor, gasket, and mounting studs.
- 2) Install four longer mounting studs. 2 3/4" longer than existing studs for TS3.
- 3) Install a new gasket, the Throttle Stop, a **four hole** gasket and then the carburetor.
- 4) Wire the Throttle Stop as shown in the following drawings. In all cases the power to the Stop should come directly from the master cut-off switch at the back of the car and not the firewall connection or where the ignition power wire is.

ELECTRIC SOLENOIDS - If you are using dual electric solenoids, use one 10-amp circuit breaker or 30 amp fuse and at least a 10 gauge wire for each solenoid. High Power Relay (p/n HPR) may be needed if you're using only one timer or a Multiple Output Timer model MOT-1.

CO2 SYSTEMS - If you are using CO2 actuators, a single 14 gauge to 18 gauge supply wire will be sufficient. Use a 5 amp fuse in the power line.

If you are using a CO2 system, plumb the air lines by taking the 1/4" diameter plastic tubing from your CO2 bottle regulator and push it into the orange air fitting on the needle valve. The tubing can be removed by pushing in on the orange locking ring on the needle valve and pulling the tubing out.

Recommended air line pressure from the CO2 bottle is 60 to 80 PSI.

INSTALLATION TIPS:

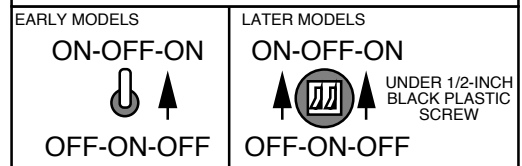
ELECTRICAL SOLENOIDS - The electrical solenoids do not draw power with the Throttle Stop in the closed position. When power is applied to open the Stop, the solenoids draw 30 amps each while the Stop is snapping open. This is only an instantaneous pulse. When the Stop is wide open, the solenoids internally switch to a "hold-in" coil and draw about 1 amp. If for any reason the butterflies do not fully open, the solenoids will overheat and burn themselves out. To prevent this, either a 10 amp circuit breaker or a 30 amp fuse must be installed in each solenoids electrical supply wires. The purpose of using large 10 gauge wire connected directly to the master cut-off switch at the back of the car is to prevent voltage drop to the solenoids, and they can snap open and then switch to the 1 amp "hold-in" coil. If the voltage is low at the solenoid, the Stop may not open fully and it will quickly burn itself out (or "pop" the circuit breakers). Dual Electric solenoid models may need a external relay for the second solenoid (See instructions).

CO2 SYSTEMS - The needle valve determines how fast the Throttle Stop opens. For a starting point, loosen the black locking ring on the needle valve and turn it all the way in. Then back out the needle valve 4 turns and tighten the locking ring. Backing the needle valve out (counterclockwise) opens the Throttle Stop faster and turning it in (clockwise) opens it slower.

SEE REVERSE SIDE FOR WIRING DIAGRAMS

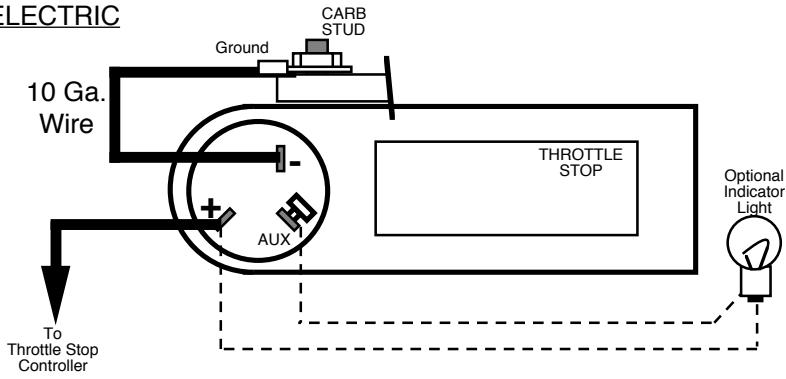
Dedenbear Throttle Stop Controllers Models TSC-2A have "OUTPUT" switches located on the front of the box. The model MOT-1 Multiple Output Timer also has this feature. This switch controls the polarity of the OUTPUT terminal. Early models had a small chrome toggle, while later models have two micro-rocker switches located under a 1/2-inch black plastic screw. For normal operation of Throttle Stop model TS-3 & flip the toggle/rockers UP to the "ON-OFF-ON" output mode. Use caution when moving the small plastic rocker type switches. Use a small wooden toothpick to avoid damage.

Note: If you are using a Model TSC-2A Throttle Stop Controller, move the toggle switch or micro switches to the **UP** position. (On-Off-On sequence)

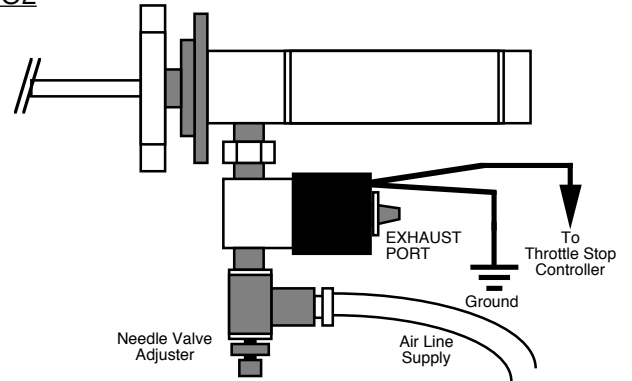


WIRING & PLUMBING: Use 10 gauge wire for Electric Solenoids & 14-18 gauge for CO2 systems.

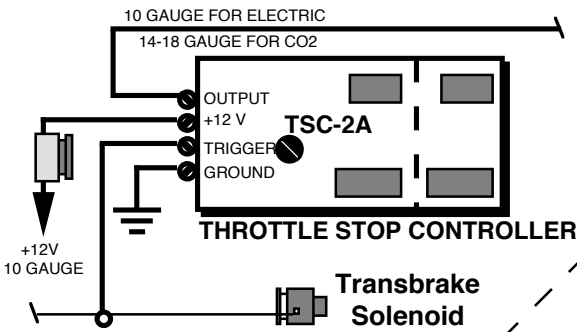
ELECTRIC



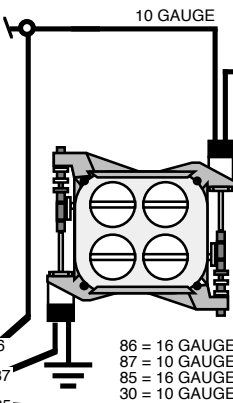
CO2



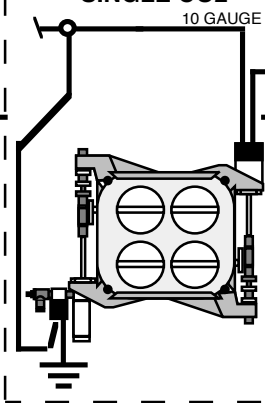
SINGLE CONTROLLER



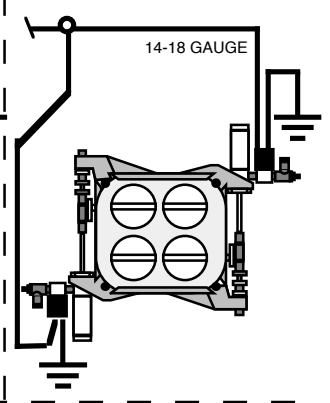
DUAL ELECTRIC



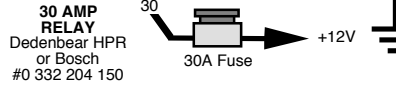
SINGLE ELECTRIC SINGLE CO2



DUAL CO2



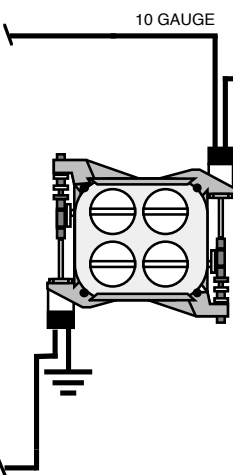
- Install a 30-amp fuse for **ELECTRIC** systems
- Install a 5-amp fuse for **CO2** systems.



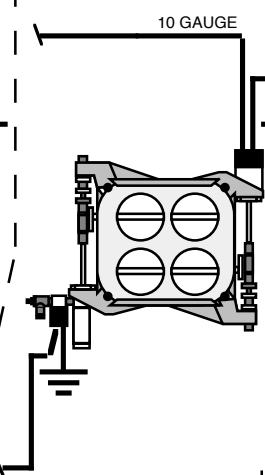
Dual Electric solenoid models using only 1 controller must use a relay to operate the second solenoid. Use either a Dedenbear HPR or a Bosch relay.

DUAL CONTROLLERS

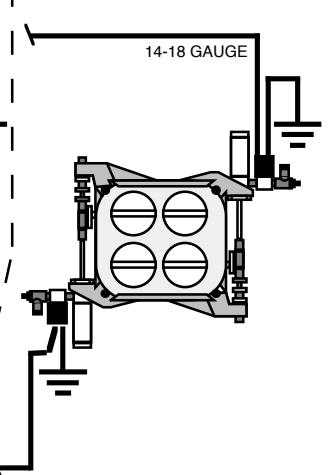
DUAL ELECTRIC



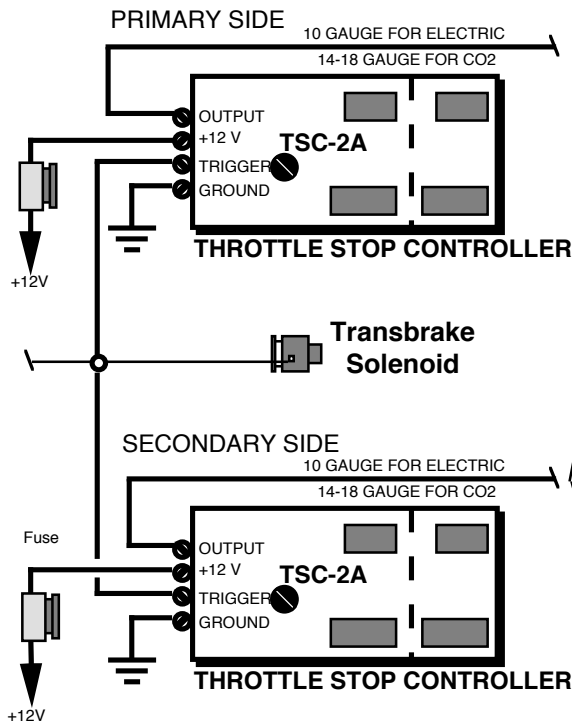
SINGLE ELECTRIC SINGLE CO2



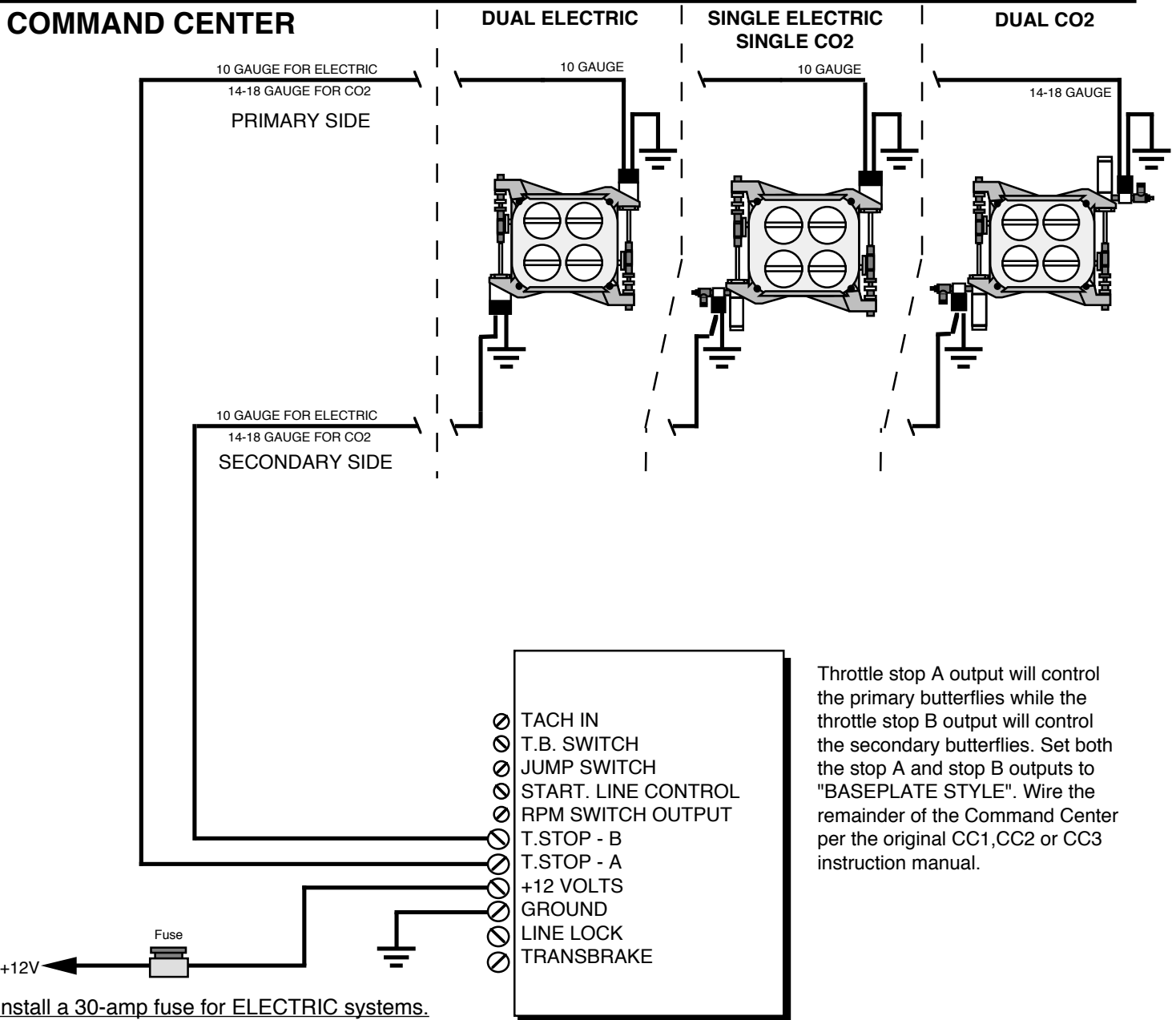
DUAL CO2



- Install a 30-amp fuse for **ELECTRIC** systems.
- Install a 5-amp fuse for **CO2** systems.



COMMAND CENTER



Throttle stop A output will control the primary butterflies while the throttle stop B output will control the secondary butterflies. Set both the stop A and stop B outputs to "BASEPLATE STYLE". Wire the remainder of the Command Center per the original CC1, CC2 or CC3 instruction manual.

- Install a 30-amp fuse for ELECTRIC systems.
- Install a 15-amp fuse for CO2 systems.

COMMAND CENTER MODELS CC1, CC2 & CC3

LIMITED 1 YEAR WARRANTY

DEDENBEAR Products, Inc. warrants to the consumer that all DEDENBEAR Products purchased from an Authorized DEDENBEAR Reseller will be free from defects in material and workmanship for a period of twelve (12) months from date of the original purchase. Products that fail within this 12 month warranty period will be repaired or replaced at DEDENBEAR's option, when determined by DEDENBEAR that the product failed due to defects in material or workmanship. This warranty is limited to the repair or replacement of parts in the DEDENBEAR Product and the necessary labor done by DEDENBEAR to effect the repair or replacement of the DEDENBEAR product. In no event shall DEDENBEAR's cost to repair or replace a DEDENBEAR under this warranty exceed the original purchase price of the DEDENBEAR Product. Nor shall DEDENBEAR Products, Inc. be responsible for special, incidental or consequential damages or costs incurred due to the failure of a DEDENBEAR Product. This warranty applies only to the original purchaser of the DEDENBEAR Product and is non-transferable. This warranty also applies only to DEDENBEAR Products purchased from an Authorized DEDENBEAR Reseller. All implied warranties shall be limited in duration to the said 12 month warranty period. Breaking the instrument seal, improper use or installation, accident, water damage, abuse, unauthorized repairs or alterations voids this warranty. DEDENBEAR disclaims any liability for consequential damages due to the breach of any written or implied warranty on all products manufactured by DEDENBEAR Products, Inc.

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